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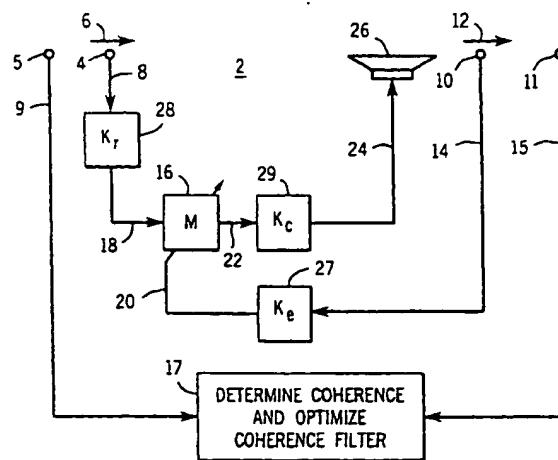
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**(54) Coherence optimized active adaptive control system**

(57) Coherence optimization is provided in an active adaptive control system. The adaptive control model (16) has a model input (18) receiving a reference signal (8) from a reference input transducer (4), an error input (20) receiving an error signal (14) from an error transducer (10), and a model output (22) outputting a correction signal (24) to an output transducer (26) to introduce

a control signal matching the system input signal (6) to minimize the error at the error input. Coherence in the system is determined, and a coherence filter (27; 28; 29) is provided according to the determined coherence. Preferably, one or more of the error signal (14), reference signal (8) and correction signal (24) is coherence filtered.

FIG. 1





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## EUROPEAN SEARCH REPORT

Application Number  
EP 95 30 3452

DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (Int.Cl.)
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
X	EP 0 517 525 A (MATSUSHITA ELECTRIC IND CO LTD) 9 December 1992 * page 6, line 55 - page 7, line 18; figure 10 *	1-3,5, 10,11,50	G10K11/178
Y		4,6	
A		7-9, 12-49	
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P,A	US 5 347 586 A (HILL PETER D ET AL) 13 September 1994 * column 9, line 18 - line 55 *	1	
A	US 4 594 695 A (GARCONNAT MICHEL ET AL) 10 June 1986 * column 1, line 47 - column 2, line 35 *	1	
			TECHNICAL FIELDS SEARCHED (Int.Cl.)
			G10K
The present search report has been drawn up for all claims.			
Place of search	Date of completion of the search	Examiner	
THE HAGUE	29 August 1997	Swartjes, H	
CATEGORY OF CITED DOCUMENTS		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons A : member of the same patent family, corresponding document O : non-written disclosure P : intermediate document	
<small>PPO FORM 150 (A4) (P07010)</small>			